HOME-GROWN ALMONDS

IMPORTANCE OF THE NUT CROP TO THE PEOPLE OF CALIFORNIA.

Introduction of the Industry - Orchards in Blossom-Method

of Harvesting.

From Country Life in America. With the increased consumption of nuts, attention has been turned to their production. The almond, alien that it is, has been experimented with in various parts of the Union. It used to be asserted that the almond would thrive wherever the peach did, so, nearly fifty years ago, the commissioner of patents obtained a quantity of almond seedlings and buds from abroad and distributed them throughout the southern and middle states. The trees grew and bloomed profusely, but did not fruit. The experiment was repeated in California, with almost an equal failure, and it was beginning to be accepted as a fact that almonds could not be raised in the United States.

The almonds are the earliest blooming fruit trees. This is why they are cultivated in Great Britain and other countries where they can never lope to mature fruit. About the first of February the buds swell out beneath their smoke-colored coats, and the orchard is bedight in softest gray-blue. Within a couple of weeks the coats are burst asunder, and now the orchard is a mass of purest cloud or of snow softly tintenlarges rapidly. By May it is the fullgrown size; but it is fliled with a jelly-like substance which is not perfectly hardened until August.

Affected by Weather.

From February until August the almond grower lives in anxiety. A cold rain during the blossoming time will wash away much pollen and leave fewer fertilized seeds. If this be escaped, no matter how large a crop, no matter how healthful trees, he dare not be too sanguine about the season's output. One night's frost will blight every nut and nullify the labor of the sea-

Then a man who owned a ranch near Suisun. Cal., threw his energy into the in-dustry. He found that seedlings produced in California matured fruits when the imfailed, and that not only did nuts differ from the foreign almond. but they varied according to the locality in which the seedling was raised. From among 192 varieties that he created four were chosen to be developed further as

At four years the tree is bearing, and the next year, if the season be a good one, the fruit pays for the harvesting. Then with each year its crop multiplies, if it be kept in good condition. It is supposed that an almond tree is in its prime when fifteen years old, but trees planted in 1860 are still bearing fine crops.

At Harvesting.

At harvesting the crop has to be handled within two or three weeks, and such laborers have to be taken as are found wander ing around the country. Naturally many of them are both unskilled and averse to

The nuts are beaten from the trees with poles and fall upon sheets spread under the tree. Then they are taken to the waree, where they are thrown into a special machine, called an almond huller and separator. In this they pass through a series of evlinders and screens and under a number of fans. In the cylinders the hulls are beaten off; the screens allow the hulled ats to pass through and east off the hulls; the fans blow out all leaves, twigs and other light rubbish. The hulled nuts fall from the separator directly on light wooden rays 3 by 8 feet, and are carried to the drying ground. Although the huller does in the combined cities of Lewiston and Aueffective work, it does not break off burn, Me. (Lewiston and Auburn are sephulls, nor does the separator definitely finish its task. The nuts not hulled fall into another tray, and they are finished by hand. The hulls are used for fuel. In the separator some nuts will be broken, and their kernels and those of the "stick-tights" are shipped at once to manufacturers of various products. The almond becomes rancid in a few days when exposed to the air without its shell.

LONDON'S WATER SUPPLY. Drinkers Absorb Carbonate and Phos phate of Calcium.

From the London Mail. fifteen years' less purchase than that of the average provincial. This fact is due to of calcium. The tea kettle proves When a Londoner examines his tea settle he must be horrified to think what

But the tea kettle reveals only a fraction filed the carbonic acid which held part of therefore invisible) is driven off and the olid calcium falls to the bottom. But boiling has no effect on the phosphates. They ill remain in solution, and are swallowed n our tea and coffee.

cause of decay and death is calcification of the blood vessels. This prevents proper circulation of the blood and produces apo-plexy. In London water we swallow enough matter to shorten our lives ten or a this life destroyer, and hence most provin-cial people live longer than Londoners. The moral is that every Londoner ought to welwill be available. The Welsh water, which the London county council hopes some day to obtain, has very little calcium salts, and it should prolong the life of its consumers by many years.

PALACES OF VENICE.

Municipal Authorities Would Not Per-

William E. Curtis in the Chicago Record-Herald. Some one has taken the trouble to telegraph from Boston to the European papers, which contain so little American news, that a Mrs. Sprague of that city has purchased a Venetian palace and intends to tear it down, take the pleces home and re-erect it in one of the suburbs, so as to outshine Mrs. Jack Gardiner, who has built Medician villa or something of that sort. lobody here knows anything about Mrs. or her plans, but it is very certain hat she will not be allowed to carry then Americans can buy Venetian palaces. veral have already done so. Some of the ost beautiful edifices on the Grand canal elong to Americans or have been bought nd restored by the dowries of American But the municipal authorities would not permit any one to pull down a palace and take the material away. There is a very strict law in Italy against the export of works of art, and a member of the royal family even could not sell or give away a cture or a statue, ornamental piece o llar from a palace without the consent of

Beautiful examples of fourteenth and fifteenth century architecture in the form of palaces may be purchased in Venice all the way from \$20,000 upward. Only a few months ago the Palazzo Ca' d'Oro, which has often been called the most beautiful residence in all the world, and certainly the finest specimen of fourteenth century othic, was purchased by Baron Francatti for \$20,000. It must have been built some time between 1270 and 1310, for its owner and builder, Ondrea Doro, was banished as a conspirator in 1310. At one time the enront was gilded and shone like burnished gold. It must have been a wonder at. Baron Francatti intends to restore it, for a building that has stood 700 rears, even in this climate, requires more or

Baron Francattl is perhaps the richest man in Venice. He is a Hebrew. His father married into the Rothschild family and has represented them in Venice for many years. He lives in an ancient palace, was completely restored about fifty ears ago and is one of the show places which tourists visit. The count is a dilettante, fond of the arts and sciences, and ublic spirited in connection with Ve even to music and has composed two peras, both of which have been produced upon the stage without much success. They are called "Israel" and "Christoforo Coombo"—the former based upon the flight of the children of Israel from Egypt, and the latter, as may be assumed from the the latter, as may be assumed from the

SMOKELESS CITIES.

Not the least interesting feature of the

St. Louis exposition of 1903 will be the at-

tempt to show the country how easily

coal is used. The managers intend that in

be so burned as to emit no visible fumes.

affix smoke-compressing devices to their lo-

special appliances to promote combustion.

them. Hence "The American Machinist" re

ered to the country greater than such ex-

the age is toward the employment of elec-

tric motors to drive machinery of all kinds,

n order to get rid of belts and shafting,

its cheap development, like Niagara or the

slopes of the Sierra. Some of the electricity

not essential, though, that it should be

burned at the precise spot where its output

When small consumers of power obtain

it. like gas, water or current for lighting and driving electric fans, from a big pro-

ducer, it should be much less expensive than when developed on the premises.

Power costs less when generated on a large

scale than on a small one. The coal con-

sumption for the most economical marine

ngines is scarcely more than one pound a

horse power hour. A twenty-horse-power engine in a back street machine shop would

want anywhere from five to eight. And, in-

suburbs than in town, the company which

operated a great power plant would doubt-less find it desirable to select a site five or ten miles from the heart of the city to

which it ministered. And if it did not go there voluntarily, and there was any doubt

on the score of smoke, then exclusion should

be effected by prohibitive local ordinances.

CO-OPERATIVE WORK.

Successful Industrial Enterprise

Maine.

The Co-operative Association of America

is more ambitious than any other co-opera-

tive enterprise yet started. It is looking

forward to larger operations than any

other, and promises greater returns to

workingmen. Although the association did

not become ready to start its first business

enterprise until about seven months ago, it

is at the present time conducting the

largest grocery business and general market

arated only by the Androscoggin river and

have a combined population of over 45,-000.) This grocery and market is situated in a commodious and beautiful building, owned and built by the association, and it is in the best business location of the two

cities. The association is also conducting successfully one of the best restaurants in

Lewiston in a building owned by itself, and is now remodeling another of its buildings

for the uses of a bakery, which it intends to

start very soon.

Furthermore, the management has plans

already definitely matured for absorbing several of the largest established business

interests of the city. This absorption is ex-pected to be accomplished before the end of the winter. Independent of this absorp-

the purchase of several large farms near Lewiston, from which it will supply its own

stores and its own co-workers with every

than 600 piedged customers who trade with it regularly, besides the unquestioned regu-

regular patronage of the public in general.
The 500 pledged customers were secured

somewhat according to the Rochdale system

of England. Each one has invested \$25 in

the business, with the understanding that

and to receive, every six months at a re-bate, most of the net profits accruing to his

HORSES OF VENICE.

Actual Count Increases the Number to

It is a popular joke to say that there are

but six horses in Venice, four over the por-

tico of St. Mark's Cathedral and two

bronze animals of heroic size, one bestrode

by Victor Emmanuel and the other by

General Colleone. But this is a mistake.

There are four other horses, also of bronze,

in the Church of St. John and St. Paul

and quite a number of plaster and marble

in the different public buildings, making

altegether at least fifteen or sixteen. Rus-

kin and other competent critics have de-

clared the statue of Colleone to be the best

equestrian monument ever cast in bronze,

It was designed and cast by Andrea Ver-

rocchio, painter, sculptor, jeweler, en-

graver, poet and musician, a man of in-finite genius, whose greatest fame lies in the fact that he was the instructor of the

greatest artists of all centuries-Michael

Angelo, Raphael and Leonardo di Vinci.

The horses on the top of St. Mark's are

famous and have had a trying experience. They date back into the prehistoric age

and are supposed to be the work of a Greek artist named Lyssippus, and de-signed for a sculptured charlot. They

and first used as ornaments upon a tri-umphal arch erected by Nero, and after-ward by Trajan. The Emperor Constan-tine took them from Rome to Constanti-nople, where the Doge Dandolo seized them

as loot and brought them to Venice. When Napoleon entered the city in 1797 he had

them taken down from the roof of the cathedral and shipped them in wagons over the Alps to Paris. They served as ornaments upon the triumphal arch in the Place du Carrousel till 1815, when the Em-

peror Francis I of Austria redeemed them and they were replaced, at his expense,

where they now stand. These wonderful animals are of pure copper, and each weighs about two tons. They were formerly glided, but the gold has been worn off by the weather, and the verdigris which has accumulated upon the control of the standard upon the s

has accumulated upon the copper gives them a rich green tint.

Rosa Bonheur's Lions.

Rosa Bonheur gave the freedom of her

gardens to the lions of the menagerie at

By. Sometimes the passersby on the road

would regard with stupefaction a tawny

lion crouching on the terrace of Mile.

Rosa, and gazing majestically from the

height of the wall which formed his pedes-

tal. However, after a while the artist grew

tired of entertaining such expensive guests,

kept the neighborhood in a constant state

which, moreover, in spite of all assurances

From Harper's Magazine.

so highly thought of.

statue of Victor Emmanuel is not

William E. Curtis in the Chicago Record-Herald.

to make his purchases at the store

grocery store and market has more

as real estate is cheaper in the

erate a tenth of the power actually ne Hence fuel is an absolute necessity.

of energy is utilized.

From the Arena.

hibitions are usually credited with."

the generation of the 20,000 or 25,000-horse-

Means Suggested to Dissipate Sooty From the New York Tribune. CHRISTIANS AND TURKS WEAR TUR-

BANS AND ZOUAVE TROUSERS. The European Costume Being Adopted smoke may be dispensed with when soft

by the Progressive Classes of the People.

power which they will require coal shall Furthermore, they will urge all railway Wm. E. Curtis in the Chicago Record-Herald. companies running trains to the grounds to Strangers find great difficulty in distinguishing between the Christians and the comotives. This policy has been adopted Turks in Bosnia, for both wear turbans, at the instigation of a local nuisance abatembroidered waistcoast, loose open jackets, ing society, and there is much reason for zouave trousers gathered at the knee, and faith in its feasibility. In fact, both on heelless shoes with toes that turn up like railways and in stationary power plants it the arms of a crescent, the same that you has of late been repeatedly demonstrated see in the windows of shops that sell Turkthat the evil in question can be overcome ish goods at home. The ordinary European by careful stoking, and without the use of costume is rapidly being adopted by those Nevertheless, conservatism is ingrained in the human mind. The majority of the con-sumers of soft coal are incredulous. And who wish to be considered up-to-date. The rich families of the middle class buy all their clothing at Vienna or Budapest, and t will take time and trouble to convince it is difficult to distinguish them from the marks that if the St. Louis plan can be Austrians. Nevertheless there are little signs by which those familiar with the country can always tell whether a man he the lesson is particularly needed in the meets upon the street is a Mohammedan or west, which is unable to obtain anthracite except at prohibitive prices. a Christian. The peasants adhere more tenaciously to the ancient customs, and by But there is another way to free a large going into the country one can get a much community from smoke. All the power required for factories and the operation of better idea of what Bosnia used to be than in the cities, although the latter are still street railways might be developed at a central station outside the city limits and

picturesque and interesting.
In Turkish times Christians were combe transmitted to consumers in the form of pelled to wear a certain costume of dark colors to denote their servile condition, and electricity. One of the great movements of it was as much as life was worth for any one to wear green, the color of the prophet. The Turks considered it sacrilege, and the and thus to save both space and power. Another advantage of the system is that the penalty for violating this unwritten law was so terrible that it was seldom broken power may be conveniently brought from Now, however, any man or womar, Chrislistant places where circumstances favor tian or Turk, is allowed to wear anything that pleases the taste and fancy, and you see mixed costumes as often as any which San Francisco now uses is generated in the Yuba valley, more than two hundred fez, which was formerly the distinguishing badge of the Mohammedans, being fremiles away. But all the streams in this country together are not sufficient to genquently worn by Christians and Jews.

Women Becoming Free.

The same change has been going on among the women. Formerly they were restricted to the harems, as in Turkey, but now they may be seen in the streets and bazaars, and even in the fields, where before the Austrian occupation it was impossible for them to appear, because of the langer of insult from any passing Turk. They never ventured far from their homes and the protection of their husbands and neighbors. It has never been customary for Turkish women to work in the fields like the Germans and Austrians; but this is all changed, I throughout Bosnia these days their bri costumes illuminate the landscape in every direction. They work side by side with men, as in Hungary. Nowadays, also, many Mohammedan hus-Bosnia allow their wives and daughters to be treated by Christian doc ors when they are ill, notwinistanding the superstition that it is contrary to the will of Allah. Enlightened Mohammedans who have observed the advantages of the socia., agricultural and administrative re-forms introduced into Bosnia, and have reflected thoughtfully upon them, are grad-ually yielding to their better judgment, and, while they will never yield in their attach-ment to the old faith, are adopting the customs and habits of the western world. The lives of women are thus becoming enlarged. They are being released from the degraded position which they occupy in all Mohammedan countries. They tell me here that the popular impression that the Mohammedan religion denies souls and immor tality to woman is a fallacy. teaches the reverse, and admits them to the hope of Paradise; and it is custom rather than a religious injunction that prohibite them from entering mosques at the same time with men. Certain hours are allotted vomen for prayer in most of the mosques, but some of them they are not allowed to

The Turk Sometimes Good.

The Turk is not altogether terrible. He to be admired in his religion and in the spirit with which he observes the injunctions of the Prophet. The Mohammedans are a curious contradiction. Although it is bribery, and the official class is absolutely intrustworthy, yet I am informed by those medan may be accepted implicitly wherever it affects members of his own faith. Their religion teaches that those who are guilty of falsehood shall have no part in the next life. In Egypt and in other countries the rule is the same as in Bosnia, that when a suit is being tried between two Moslems the defendant, if he has justice on his side, will insist that the plaintiff be compelled to testify, feeling confident that he will tell th exact truth, if properly questioned, and admit that he is wrong. Thus it is not because of religion, but in spite of it, that corruption is universal wherever the Turks

BOSNIA'S CAPITAL.

Attractive Approaches to and Good Features of Sarajevo. William E. Curtis in the Chicago Record-Herald.

The capital of Bosnia occupies a sightly place in a wide valley surrounded by picturesque mountains and is divided into two rapid, foaming stream which tumbles over a rocky bed. Nine or ten artistic bridges some of them incrusted with the lichens of centuries, are approached by wide, wellhaded streets which slope up the mountain ides with a comfortable grade and give

Observed from the distant hills, Sarajevo oks as if it were built in terraces, and the the roofs of the houses. In many places are luxuriant gardens reached n the oriental style, but they are generally water supplied from the mountains for domestic purposes and for the many foun-tains which decorate the interior paties of the houses and gardens. While the resi-dential portion of the town is irregular and only partially built up, Sarajevo compares well in architecture and in every other repect with any city of its size in Europe or America, and some time will be a beautiful place, for it is much favored by nature, and the inhabitants are rapidly accumulat-

Sarajevo has been frequently compared with Jerusalem and Damascus. It is often called "the Damascus of the north," and lance to those venerable cities, but the new part is more like a German or an Italian town. There are several mosques with minuettes and domes and spires. Churches every religion, fine office buildings apartment houses, government buildings and public institutions. The rathaus or city hall is a beautiful modern structure of the oriental school of architecture, and might have been transplanted from Con-stantinople or Algiers, while the scheriatstantinople or Algiers, while the scheriat-schule, a law college, is also imposing. The citadel or castle, which formerly was the residence of the Turkish governor, is an irregular inclosure defended by a high wall with a collection of buildings representing several ages and schools of architecture. It is now garrisoned by a battalion of Aus-trian traces whose gay uniforms delight trian troops, whose gay uniforms delight the eyes of the people.

So far as laws made for the protection of food are concerned, milk, which is a universal food, has less protection than any other. Nothing absorbs impurities more rapidly than does milk. The writer believes that it is proven beyond doubt that that transmission of tuberculosis from man to animal and animal to man is an assured fact. He is convinced that tuberculosis can be transmitted through milk. Dairymen should be kept the neighborhood in a constant state of terror, and she gave her last lion, so carefully tamed, to the Jardin des Plantes. It was a privilege to hear the charming woman tell of her visit to her imprisoned pet, of how sad he was, reveling no longer in the caresses of his mistress, while his mane looked dirty and uncombed. "The poor animal," said she, "rose up when he saw me, and his glance, so eloquent and pathetic, seemed to tell me—I am wrong; his look actually said: 'See what they have done to me. I am weary. I suffer. Save me! Take me back!" impressed with the fact that the number of bacteria in milk depends upon four things: (1) The original amount of germicidal substance in the milk over which they cidal substance in the milk over which they have no control; (2) the number of bacteria falling in during the milking or afterward; (3) the length of time which has passed since milking; (4) the temperature at which it is kept. This subject is now with the medical profession, boards of health, the dairymen and the people. The harmonious working of all these factors can so reduce the bacterial army that its power for destruction will be reduced to a minimum.

DWELLERS IN BOSNIA TELEGRAPHY LONG AGO. Exchange of Messager Between Wash ington and New York in 1846.

Reports of experiments with wireless telegraphy give renewed interest to the experiments in telegraphy which were con ducted at Washington Boltimore, Phila-delphia and New York it 1846. An ac-count of these is given in the Washington Union of June 8, 1846, as allows:

"On Saturday evening last, June 6, Professor Morse, the inventor and superin tendent of the magnetic felegraph, and his assistant, Mr. Vail, in their office at Wash ington, wished to test the integrity of the telegraphic line the whole distance through to New York, a distance of no less than 260 miles. The better to understand the singularity of the scene we are about to record, the reader must imagine four inone at Baltimore, forty miles distant; at New York (or rather Jersey City, opposite New York), 112 miles farther.

"The telegraphic lines pass through the instruments at the offices at each of these places, and a communication dispatched from any one is written and instantly understood at all the others. We shall design nate the operators by the names of the places at which they are stationed. "Washington—Baltimore, are you in com-munication with Philadelphia?

"Baltimore—Yes.
"Washington—Put me in connection, with

"Baltimore—Aye, aye, sir; walt a minute. (After a pause). Go ahead. You can talk with Philadelphin. Washington-How do you do. Philadel

"Philadelphia-Pretty well. Is that you Washington? "Washington-Aye, aye. Are you con-nected with New York?

"Philadelphia-Yes. "Washington-Put me in connection wit "Philadelphia-Aye, aye; wait a minute After a pause). Go ahead; now for it. Washington-New York, how are you

(New York does not answer). "Philadelphia—Hello, New York. Wash-ington is talking to you. Don't you hear him? Why don't you answer? "New York-I don't get anything from "Washington-I get that from New York.

"Baltimore—How is it that Washington hears from New York, and New York does not hear from Washington?
"Philadelphia—There's where I'm floored. "Baltimore-What is the reason Washing

"Philadelphia—New York, Washington says he gets that from you.

"Washington—Because New York has not properly adjusted his magnet. "Philadelphia—I've been hard at work all day. I feel like bricks. Had no supper I have had a stiff evening's work; there have been many messages tonight—one alone gave us \$17. I want to go.

"Washington-Wait a little! "Baltimore—Go it, ye cripples.
"Philadelphia—Who is writing?

"Washington-Don't all talk at once.
"Baltimore-Mary Rogers are a case; so re Sally Johnson "General Jackson are a hoss, so are Colonel Johnson. "Philadelphia-Who is that? I will discuss that p'int.

"Washington - Baltimore, keep Philadelphia, tell New York to ask me to write dots. (That is to adjust his magnet). "Philadelphia—Aye, aye, sir. Washington, write dots. (Washington begins to write dots). That's it; O. K. Now I have

Washington-New York, do you now get "New York—Aye, aye; sir,
"Washington — Did you get Professor
Morse's message for his daughter?
"New York—Yes, from Philadelphia; but

t's too late to send it over the river toight. I am all alone, and the two boys "Washington-Very well; no matter.

"Baltimore-Good night; I'm going." Washington-Good night, all.

Philadelphia-Good might, 'New York-Good night.

"And so ends a curious scene; not an imaginary one, but one of actual occurrence. Let any one reflect upon the fact that all these questions and answers occurred in a space of time but very little longer than that in which this unique drama has been

THE GUERRILLA IN HISTORY. Spanish Word Which Became Com

mon After Peninsular War. From the Fortnightly Review. The word guerrilla is Spanish, and first came into common use in this country during the time of the peninsular war. But Spain throughout her long history has always been recognized as the country most ideally suited for guerrilla tactics. There is no region in Europe in which it is more difficult to wage successful war. "If the army of invasion is small, it is defeated; if it is large, it starves." Even in Livy's time the truth of this was appreciated by the medicine during the whole century.

Remans. The remnant of the Carthagini.

Another distinguished Frenchman was do-Romans. The remnant of the Carthaginians who had taken refuge there after the fall of Carthage had defled the Roman power with great persistency, while the Spanish insurrection of Quintus Sertorius

had seriously shaken the stability of the republic itself. For eight years that able general held the forces of Rome at bay. His invariable policy was to avoid a pitched battle when confronted with superior forces, and to confine himself to harassing his opponent and cutting his lines of communications. Sertorius' lieutenants were frequently defeat-ed, but their chief managed to inflict severe checks even upon Metellus and Cnaeus Pompeius, and then, when the tables ap-peared to be turned the Lusitanian army would silently melt away and gather again in some distant part of the province. Rome grew impatient and depressed as the seemingly endless coatest continued, and as army after army was sent to Spain with apparently no definite result. Yet, as the

The Lusitanian troops, which at one mo nent gathered in their thousands and dwiniled away just as speedily, could accomplish nothing permanent, and with the as-sassination of Sertorius the end came quicky. For eight years Spain had threatened ward Cuba actually became to Spain; ye Roman persistency triumphed in the end It was in Spain, too, that the two sons of Pompeius the Great, Cnaeus and Sextus, maintained a stubborn opposition to the generals whom Julius sent into the field against them, and even after Cnaeus had been slain Sextus returned to the scene on his former exploits and inflicted far mor damage than he received until he trans-ferred himself to Sicily and pitted himself against Octavian and Agrippa.

Origin of Absinthe. from the New York Herald.

Temperance people in Europe were re cently much surprised at the discovery that the deadly absinthe was originally an extremely harmless medical remedy. It was a French physician who first used it. His name was Ordinaire and he was living as a refugee at Couvet, in Switzerland, at the close of the eighteenth century. Like many other country doctors at that time, he was also a druggist, and his favorite remedy was a certain elixir of absiathe, of which he alone had the secret. At his death he bequeathed the formula to his housekeep-er, Mile. Grandpierre, and she sold it to the daughters of Lieutenant Henroid. They cultivated in their little garden the herbs necessary for concocting it, and after they had distilled a certain quantity of the liquid they sold it on commission to itinerant peddlers, who quickly disposed of it in the adjacent towns and villages. Finalin the adjacent towns and villages. Finally, during the first decade of the nineteenth century, a wealthy distiller purchased the formula, and very soon afterward he placed on the market the modern absinthe, which differs greatly from the old medical remedy, since the latter contained no alcohol and very little absinthe.

rom America, has had a friendly bout with Mark Twain over the dinner table and ame off victorious. Mark Twain was chafing Sir Wemyss on the vagaries of English pronunciation. "You spell a name B-e-a-uc-h-a-m-p and pronounce it Marchbanks," may be positors things," replied Sir Wemyss. "What do you mean?" asked Mark Twain. "Weil, you spell your name C-l-e-m-e-n-s and you pronounce it Twain."

LANDMARKS IN MEDICINE!

BRIEF REVIEW OF SOME OF THE GREAT MEDICAL DISCOVERIES.

From Mosher's Magazine

Vaccination Was Suggested to Jenner - The Beginning of the Stethoscope.

Just before the beginning of the nine-

eenth century an epoch-making discovery was made by an English country physician that foreshadowed the greatest advances that were to be made during the next hundred years in medicine. Edward Jenner (1749-1823), finding a tradition among milkmaids in his native Gloucestershire that those who had suffered from a disease called cowpox, caught from an eruption on the cows' udders, did not afterward contract smallpox, investigated the matter. He found that cowpox was probably an animal modification of human smallpox, and he suggested the introduction of vaccinationthat is, inoculation with the virus of cowpox—in order to produce immunity to small-pox. At the end of the eighteenth century his practical application of a chance dis-covery anticipated such ideas as immunity, protection and modification of disease, that re now, at the beginning of the twentleth century, topics of acutest interest in the At the beginning of the nineteenth cenmost of the symptoms of disease were due to living causes. As nothing was known of the minute germs of disease it was concluded that worms in the intestinal trace were a frequent cause of otherwise inexplicable symptoms. A great number of prescriptions for the removal of worms were in use. The vermifuges, as they are called, were the most popular family remedies.

Supposedly scientific medicine at this time

was occupied with the thought that disease was due to a change in one of the humors of the body, the blood, the lymph or the bile. During the first few years the teaching of the eminent Frenchman Bichat (1771-1802) did much to counteract this false otion. He showed that most diseases were due to changes in special tissues.

The first to take advantage of Bichat's teaching and apply it seriously to practical medicine was another Frenchman, Laennec 1781-1826). Laennec found that by listening to the sounds produced in the heart and the lungs he could tell much of the character of the ailments from which these organs suffered. This was an extremely imortant advance in diagnosis. At first Laennec applied his ear directly to the chest. During his investigations into diseases of that part of the body, a young woman was admitted to the benefit of his service at save her modesty he did not apply his ear paper as a tube to convey the sound from the chest to his ear. This was the first stethoscope, and the invention of an instrunent that has proved of very great service in the accurate detection of lung and heart

After Laennec the most important work on a special organ was done in England by Richard Bright (1789-1858), who showed that certain symptoms, and especially dropsy, were connected with changes in the kidneys. Bright's work was very complete in its way, and since then the degenerative kidney affections have been called Bright's disease.

A revolution in medical thought with regard to the basis of disease was prepar-ing. Theodor Schwann (1810-1882), a German professor in the Catholic University at Louvain, showed that the tissues of all animals, like those of plants, are composed of distinct minute portions separated from one another, which he called cells. The study of cells and cell life soon led to better knowledge of the intimate constitution of organs and of the manner in which their functions are performed.

Cellular Pathology. Another famous German, Virchow, (1821--), the father of cellular pathology, as he is called, showed, about the middle of the century, that it is not the organs as a whole that are affected by disease, but the cells of which the organs are composed. Not all of the cells are affected, but different ones in different diseases. This was the new idea that was to revolutionize

Vienna were teaching that disease was due to changes in the body humors. Another great change in medicine was effected by the illustrious Frenchman, Pasteur (1822-1895), shortly after Virchow's first work was published. Pasteur showed that certain diseases in animals, and, later, certain diseases in human beings also, are due to the presence of minute living germs, which are called bac-teria. Pasteur's work represents some of

the ductless gland and a number of the mportant physiological truths with regard to the nervous system and nervous reflexes that enable us to understand the intimate sympathy that exists between all portions

Lord Lister, following closely the work done by Pasteur with regard to the existence of germs in the air that cause fermentation, suggested the employment of methods to prevent these germs from get-ting into wounds—the antiseptic treatment. This made possible the great advances in surgery at the end of the nineteenth cen-

THE KING'S NEW COINAGE. Suggested Changes on English Half-Crowns and Florins.

From the London Chronicle. We learn that a proposal is under con sideration by the authorities to stamp the new half-crown, on the reverse side, with its monetary value, which is at present not indicated. A florin does proclaim its own value, but in Roman characters not very plain to the eye. That being so, a change will probably here be made to a plainer lettering. These suggestions may furnish one reason why, in the official announcement made yesterday, with reference to new coinage, nothing was said as to the new silver coins.

Asked yesterday what he thought of the

King Edward coinage a leading member of the Numismatic Society said, "Its great interest to us is artistic, and one cannot come to any decision in that matter merely from published descriptions of the coins. Wait till we see them." He mentioned that though £5 and £2 gold pieces were being issued, it was only in accordance with custom, and there did not seem to be any ex-pectation that they would be much used in commerce. In the coinages of George I two-guinea gold pieces were issued. It was the same with the George III coinage, but when George IV came to the throne a change was made to five-pound and two-pound pieces.

Inquiry made at the West End firm of numismetists elicited the information that

mismatists elicted the information that, so far, no great demand had come from collectors anxious to get early examples of the King Edward coins.

A Nebulous Banking System. It must be evident to the thoughtful ob-

server that although considered as a system the banks of the United States are still in the nebular stage of development, nevertheless there are many signs of a satisfactory evolution. The perfected system. which may be the outcome of the present apparent confusion, may not be exactly like either the English or the Scotch or any existing system of banks. The principles on which it will work must, however, be the same on which all good banking systems must found their success. It will be adapted to the country, for it will have been formed under the pressure of business demand, against political and banking prejudice. Many things may be done to hasten this evolution. An asset currency would aid greatly. Branch banks would also aid, but it is impossible to predict whether the system will be consolidated by these devices or not, or by some other new device. or not, or by some other new device. It may be that the use of checks drawn by depositors or by the banks themselves, which has already attained to such great proportions, may be still further developed so as to supply the means of an extension of credit.

A Clear Eye

and clear complexion are signs of good health. To enjoy good ealth your blood must be pure and your system in general in a healthy condition, otherwise the organs will not do their duty. The natural

Carisbad Sprudel Salt

regulates the organs, effectually cleanses the system and purifies the blood. Catarrh of the stomach, bowels or bladder is cured by the Carlsbad Sprudel Salt. It is also a positive remedy for constipation, liver and kidney complaints.

The genuine imported Carlebad Sprudel Salt bears the signature of EISNER & MENDELSON Co., Sole Agents, New York, on every bottle

BECAUSE OF FEW SMOKERS.

Why the Yale Freshmen Have Such Remarkably Strong Lungs This Year. From the New York Sun.

Dr. Jay W. Seaver, director of the Yale gymnasium, having completed measurements and physical statistics of the freshman class, says that the class has a greater lung capacity than that of any class at Yale in recent years. This is due, he thinks, to the small percentage of smokers. The average lung capacity of the class is 260 cubic inches, which is five inches more than the lung capacity of last year's class. It is probable that the number of men using tobacco in the present freshman class is 10 per cent smaller than that for many

years. The class contains more athletes, and it is believed that the fact that many students give up smoking when they take up athletic training, and in many cases do not resume, is one of the reasons for the small percentage of smokers. The average age of percentage of smokers. The average age of the class is nineteen years one month, which is fifty-six days younger than the average of last year's class. The average weight is 134 pounds, six pounds less than last year. The average height is 5 feet % inch, or 0.4 inche less than last year. The average size of the chest when inflated is 35.9 inches, the average measurement the biceps is 11.4 inches, which is 0.2 inch naller than last year. The average height sitting is 2 feet 10.8 inches.

A French Newspaper Directory. From the London Globe.

The French Society of Authors is bringing out a manual for private circulation among its members, containing useful information for writers. It will include a list of provincial newspapers, under five headings; Those who reply to letters sent to them those who reply sometimes; those who never reply; those who reply to letters with stamp inclosed; those who keep the stamp and do not reply.

> AUCTION SALES. TOMORROW.

75 Horses and Mules. Tomorrow, Saturday, 10 A. M., at our Auction Stables, 205 11th St.,

Charles Fagan will sell a load of good Horses, shipped direct from the farms of Frederick county, Md. One Speedy Pacer, one Trotting Horse and several pairs of good Workers and Drivers; 10 head of Henvy Farm Horses from Elmira, N. Y.; 10 Horses for a contractor and 4 Mules; one fast Pacer, one Trotting Horse. These will be sold for a party in the city. Several Horses, Buggies, Wagons and Harness.

Magrath & Kennelly.

C. G. SLOAN & CO., AUCTIONEERS, 1407 G ST.

First Sale of the Year. Furniture, Carpets, &c.,
WITHIN OUR AUGTION ROOMS,
1407 G St., 1902 Saturday, January 4th, 1902,

COMPRISING ELEGANT ROUND-END BRASS BEDSTRAD, SUPERB MASSIVE OAK CHINA CLOSET, LARGE ROUND MAHOG, EXT. TABLE, HANDSOME DDD MAHOG, BUREAU, HANDSOME LOUIS XIV GILT PARLOR SUITE, SOME HANDSOME MAHOG. PIECES, RICH PARLOR SUITES, MORRIS CHAIRS, MUSIC CABINETS, LADIES' DESKS, COMBINATION BOOK CASES, LIBRARY TABLES, HALL RACKS, IRON SAFE, MAHOG. AND OAK CHIFFONIERS, EXT. TABLES, DINING CHAIRS, SIDEBOARDS, WARDROBES, FOLDING BEDS, LEATHER D. R. CHAIRS, ODD TABLES, CHAIRS AND ROCKERS, TWO RARE OLD SENATE CHAIRS, RICH 9 x 12 RUGS, SEVERAL ORIENTAL RUGS, RICH MAHOGANY QUARTERED OAK AND WALNUT CHAMBER SUITES AND ODD PIECES, COUCHES, COMMODES, TWO LARGE ANTIQUE OIL PAINTINGS, MIRRORS, PICTURES, CHINA AND GLASS, TOILET WARE, MATTRESSES, PILLOWS, BEDDING, CARPETS, LOT ORDINARY FURNITURE, S UN D R I E S, COOKING UTENSILS, CARPETS, &c., ALL NOW ON VIEW. AND, AT TWELVE M.,
HORSE, HARNESS AND VEHICLES.
C. G. SLOAN & CO., Aucts., 1407 G st.

ja2-21-42

JAMES W. RATCLIFFE, AUCTIONEER.

EXECUTRIX'S SALE OF OFFICE FURNITURE,
TYPEWRITER, LARGE "MILLER" IRON
SAFE, &c.
ON SATURDAY, THE FOURTH DAY OF JANUARY, 1902, AT TEN O'CLOCK A.M., I will sell
by public auction, within the sales rooms of James
W. Ratcliffe, 920 Pa. ave. n.w., Oak and Walnut
Rolling-top Desks, Office Tables, Typewriter and
Typewriter Desk, Letter Press, Office Chairs,
Stools, Iron Safe, &c., to which I invite general
attention.

Terms cash.

RUTH A. BARNARD,
Executrix of the Estate of Milton C. Barnard BARNARD & JOHNSON, Attorneys,

FUTURE DAYS. JAMES W. BATCLIFFE, AUCTIONEER.

Trustees' Sale of Hotel Furniture and Lease, Liquor License and Bar Fixtures of the Germania Hotel, at Nos. 470 and 472 Pennsylvania Avenue N. W.

By virtue of a deed of trust-chattels, dated March 2, 1901, and recorded among the land records of the District of Columbia in Liber 2584, folio 29 et seq., and at the request of the party secured thereby, we will offer, at public auction, in front of the premises above mentioned, on THURSDAY, THE NINTH DAY OF JANUARY, 1902, AT TEN O'CLOCK A.M., all the Furniture, Fixtures and Fittings of the above hotel and bar (as said property is more fully described and enumerated in said chattel deed of trust), including the liquor linense at and the lease of said premises.

Terms of saie: Cash. A deposit of \$200 will be required at time of saie. Saie to be closed in twenty (20) days from day of saie, otherwise property will be resold at the risk and cost of defaulting purchaser, after five (5) days' advertisement in some newspaper published in Washington, D. C. Conveyancing, recording and revenue at the cost of purchaser.

F. H. GEYER, Trustee,

ost of purchaser.

F. H. GEYER, Trustee,
703 N. Capitol st.
JOHN B. LARNER, Trustee.
ALEXANDER H. BELL.

PHOS. J. OWEN & SON, AUCTS., 918 F ST. N.W.

AUCTION SALES

FUTURE DAYS.

THOS. J. OWEN & SON, AUCTS., 913 F ST. N.W. Attorney's Sale of Frame Dwelling, No. 426 New York Avenue N.W., to Close an Estate.

By virtue of authority vested in the undersigned I will sell, at public auction, in front of the premises, on THURSDAY, JANUARY NINTH, 1902, AT HALF-PAST FOUR O'CLOCK P.M., lot SI, in square "N. 515," with the improvements thereon.

Terms: One-third cash, balance in one and two years, with interest, secured by deed of trust on the property sold, or all cash, at the purchaser's option. A deposit of \$100 will be required at time of sale. Conveyancing and recording at purchaser's cost. Sale to be closed in 15 days.

WILL W. DOUGLAS,

Atlantic Building.

Attorney for the Heirs.

DUNCANSON BROS., AUCTIONEERS.

TRUSTEES SALE OF VALUABLE IMPROVED PROPERTY AT THE NORTHWEST OGRNER.
OF FIRST STREET AND PENNSYLVANIA AVENUE NORTHWEST.
By virtue of a decree of the Supreme Court of the District of Columbia, passed in Equity Cause numbered 22499, docket 50, we will sell, in front of the premises, ON TUESDAY, THE FOURTEENTH DAY OF JANUARY, A.D. 1902, AT FOUR O'CLOCK P.M., the following described property, situate in the city of Washington, District of Columbia, to wit: Lot numbered 1, in square numbered 575, the same having a frontage of about 19.96 feet on Pennsylvania avenue northwest, by a depth of about 45.50 feet on list street northwest, being improved by a brick restaurant and hotel, known as No. 101 Pennsylvania avenue northwest, together with all and sheafer. The right wavenesses No. 101 Pennsylvania avenue northwest, together with all and singular, the rights, ways, casements, privileges, appurtenances and improvements to the said piece or parcel of land belonging, or in any

privileges, appurtenances and improvements to the said piece or parcel of land belonging, or in any wise appertaining.

Terms: One-third of the purchase money shall be payable on the day of sale or fifteen days thereafter, one-third in one year and one-third in two years thereafter, with interest on the deterred payments from the day of sale, the deferred payments to be represented by the promissory notes of the purchaser or purchasers, secured by deed of trust upon the property sold, or all cash, at the option of the purchaser or purchasers. A deposit of \$200 will be required at time of sale. Terms of sale to be complied with in fifteen days from day of sale, otherwise trustees reserve the right to resell the property at risk and cost of defaulting purchaser or purchasers, after giving five days' notice by advertisement of such sale or sales in some newspaper published in the city of Washington, District of Columbia.

WILTON J. LAMBERT,

EDWIN B. HAY, Trustees. JAMES W. RATCLIFFE, AUCTIONEER.

JAMES W. RATCLIFFE, AUCTIONEER.

TRUSTEE'S SALE OF THREE-STORY, BASEMENT AND ATTIC BRICK OFFICE BUILDING AND DWELLING, NO. 504 E STREET NORTHWEST. By virtue of a certain deed of trust, duly recorded in Liber No. 2152, folio 301 et seq., of the land records of the District of Columbia, and at the request of the party secured thereby, the undersigned, as surviving trustee, will sell at public auction, in front of the premises, on MONDAY, THE SINTH DAY OF JANUARY, A. D. 1902, AT HALF-PAST FOUR O'CLOCK P.M., the following described land and premises, situate in the city of Washington, in the District of Columbia, and being parts of original lots 10 and 11, in square 459, described as follows, namely: Beginning for the same on the south line of E street north at a point 50 feet west from the northeast corner of said original lot 11 and running thence south 25.54 feet, thence west 12 feet 2 inches, thence south 25.54 feet, thence west 12 feet 15% inches, thence north 100.54 feet to the line of said street, thence east along said street 22 feet 1% inches to the place of beginning, together with the improvements, consisting of the above mentioned building.

Terms of saie: One-third of the purchase money to be paid in cash, and the balance in two equal installments, payable in one and two years, with interest at five (5) per centum per annum, payable semi-annually, from day of sale, for which notes of purchaser to be given, secured by deed of trust upon the property sold, or all cash, at the option of the purchaser. A deposit of \$250 will be required of the purchaser at the time of sale. All conveyancing, stamps, recording and notarial fees at the cost of the purchaser. Terms of sale to be complied with within ten days from day of sale, otherwise the trustee reserves the right to reself the property at the risk and cost of the defaulting purch ser. William E. EDMONSTON, Trustee, de24-deds

WALTER B. WILLIAMS & CO., AUCTIONEERS.

WALTER B. WILLIAMS & CO., AUCTIONEERS

TRUSTEE'S SALE OF VALUABLE IMPROVED BEAL ESTATE IN NORTHEAST, BEING CORNER, NO. 601 H STEEET, AND WARE-HOUSE IN ALLEY IN SQUARE 859.

By virtue of a deed of trust, recorded in the office of the recorder of deeds for the District of Columbia, in Liber 2485, at folio 376, and by direction of order of Bankruptcy Court, passed December 27, 1901, in case Bankruptcy No. 201, i will sell, at public auction, in front of the premises, on WEDNESDAY, THE EIGHTH DAY OF JANUARY, 1902, AT FOUR O'CLOCK P.M., sub-lot 59, in square 859, improved by a two-story brick store, dwelling and stable, known as number 601 H street northeast. And immediately thereafter, part of lot 122, in square 859, improved by a two-story brick warehouse, located in alley in squares 559.

Square 850.

Terms of sale, as to the first parcel, all over the sum of \$4,000, now on said property, in cash. As to the second parcel, all cash. Takes paid to day of sale. All conveyancing, recording and stamps at purchaser's cost. A deposit of \$250 on first parcel and \$50 on second parcel will be required of the purchaser at the time of sale. Terms to be compiled with within ten days from day of sale, otherwise the trustee reserves the right to resemble property at the risk and c st of the defaulting purchaser.

L CABELL WILLIAMSON, Trustee.

L CABELL WILLIAMSON, Trustee, 472 La. ave. b.w. de28-d&ds

THOS. J. OWEN & SON, AUCTS., 913 F ST. THOS. J. OWEN & SON, AUCTS., 913 F ST.

TRUSTEES' SALE OF BRICK DWELLING, NO.

1249 9TH STREET NORTHWEST.

By virtue of a deed of trust to us, duly recorded among the isnd records for the District of Columbia in Liber No. 2379, at folio 122 et seq., and dated January 28, 1859, we will sell, at public suction, in front of the premises, on WEDNESS-DAY, THE EIGHTH DAY OF JANUARY, 1902, AT HALF-PAST FOUR O'CLOCK P.M., the following described property, situate in the city of Weshington, District of Columbia, and described and being all of lot forty-one in Peter M. Dubant's subdivision of lots in square four hundred (400), as per plat recorded in Liber W. B. M., folio 281, of the records of the office of the surveyor for the District of Columbia.

Terms of sale: One-third cash and the balance in one, two and three years, with interest thereon at the rate of 5 per cent per annum, payabis semi-annually, the deferred payments to be represented by notes of the purchaser, secured by deed of trust upon the property sold, or all cash, at the option of the purchaser. A deposit of \$250 to be required at the time of sale, and all conveyancing, recording and revenue stamps to be at the cost of the purchaser. Terms of sale to be complied with within ten days from day of sale, otherwise the trustees reserve the right to reselisald property, at the risk and cost of the defaulting purchaser, after at least five days' notice of such reasle in some newspaper published in the city of Washington, D. C.

ALBERT A. WILSON, JOHN D. C.

THOS. J. OWEN & SON, AUCTS., 913 F ST. N.W. TRUSTEES' SALE OF NEARLY NEW RESIDENCE, NO. 1227 HARVARD STREET, COLUMBIA

TRUSTEES' SALE OF NEARLY NEW RESIDENCE, NO. 1227 HARVARD STREET, COLUMBIA HEIGHTS.
By virtue of a certain deed of trust to us, recorded in Liber 2426, follo 331 et seq., among the land records of the District of Columbia, we will sell at public auction, in front of the premises, on TUESDAY, THE FOURTEENTH DAY OF JANUARY, 1902 AT HALF-PAST FOUR O'CLOCK P.M., the following described property, situate in the county of Washington, District of Columbia, and known as lot forty-three (43) of Lester A. Barr and Franklin T. Sanner's subdivision of part of block twenty-three (23), "Columbia Heights." as per plat recorded in Liber County No. 11, folio 114, of the records of the surveyor's office of the District of Columbia, together with improvements thereon, consisting of a three-story and cellar, nearly new brick residence, heated by steam.

Terms of sale: \$500 cash or more, purchaser to assume existing deed of trust of \$5,500, and belance, if atv, payable \$35.00 per month, at 6 per cent interest, and to be secured by second deed of trust on troperty sold. Deposit of \$200 required at time of sale, and all conveyancing and recording at purchaser's coat. Terms of sale to be compiled with within fifteen days, or trustees reserve the right to resell at risk and cost of defaulting purchaser's coat. Terms of sale to be compiled with within fifteen days, or trustees reserve the right to resell at risk and cost of defaulting purchaser, after at least five days' notice of such resale in some newspaper published in Washington, D. C. CHAS. W. FAIRFAX, Trustee.

CHANCERY SALE OF BRICK DWELLING NO.

Ja2-dads WM. A. HILL, Trustee.

CHANCERY SALE OF BRICK DWELLING NO.

304 G ST S.W.

By virtue of a decree of the Supreme Court of the District of Columbia, passed in equity cause No. 20,679, the undersigned, trustees, will sell, at public auction, in front of the premises, on TUES-DAY, the FOURTEENTH DAY OF JANUARY, 1902, at HALF-PAST FOUR O'CLOCK P.M. sublot forty-eight (48), in square five hundred and forty (540), in the city of Washington, in the District of Columbia, improved by brick dwelling, known as 304 G st. s.w.

Terms: One-third cash, balance in one and two years, in equal installments, with interest at 6 per cent per annum, payable semi-annually, and secured by a deed of trust on the property sold, or all cash, at the option of the parchaser. A deposit of one hundred and fifty dollars (\$150.00) will be required at time of sale. Conveyancing, recording, etc., at cost of purchaser. Terms of sale to be complied with in fifteen (15) days from date of sale, otherwise property to be resold at risk and cost of defaulting purchaser.

EDWARD L. GIES, Trustee, Office Rooms 32 and 33, Warder bidg., 9th and F
SIS. B.W.; VINCENT A. SHEERLY. Trustee.

JAMES W. RATCLIFFE, Auctioneer. Ja2-644 WALTER B. WILLIAMS & CO., AUCTIONEERS

L CABELL WILLIAMSON, Receiver,